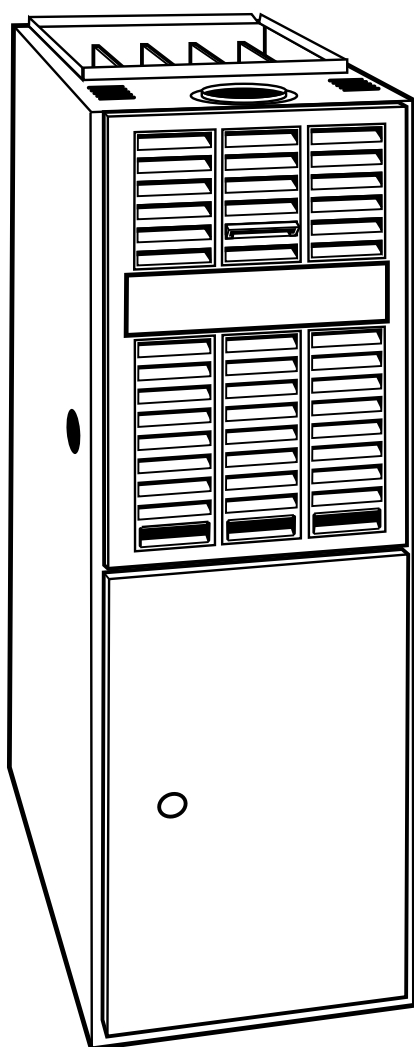




Product Data

58TUA WeatherMaker® 8000TS with Comfort Heat Technology™ Upflow Furnace

Series 120
Input Capacities:
40,000 thru 135,000 Btuh



ComfortHeat
TECHNOLOGY

Comfort Heating for Energy-Efficient Gas Furnaces

Carrier leads the industry with our new WeatherMaker® 8000TS Induced-Draft Gas Furnace. This furnace can operate at 2 different speed settings which provide outstanding home comfort. The WeatherMaker 8000TS furnace with Comfort Heat Technology™ is built with the most advanced manufacturing equipment, processes, and technology available in order to ensure top quality. Packed into the cabinet are the industry's foremost dealer and homeowner features. The 58TUA Upflow Furnace is a great asset to Carrier's list of product leadership in the gas furnace industry.

These Comfort Heat Technology induced-combustion, gas-fired furnaces offer not only low installation costs, but fuel economy as well—delivering an Annual Fuel Utilization Efficiency (AFUE) rating of 80.0 percent. The Carrier WeatherMaker 8000TS utilizes a hot surface, silicon carbide ignition system to save energy and increase reliability.

Our design uses the patented S-shaped 4-pass heat exchanger, a soft mount 2-speed inducer assembly, and a 2-stage slow-opening gas valve to minimize sound level. The Super-S heat exchanger provides better heat transfer while enabling us to make a compact furnace. This provides more room in

closet, utility room, and short basement installations. The heat exchanger is constructed of aluminized steel and is backed by a 20-year Limited Warranty.

The Carrier WeatherMaker 8000TS Gas Furnace will meet your home heating requirements. This furnace family provides the widest range of heating capacities available.

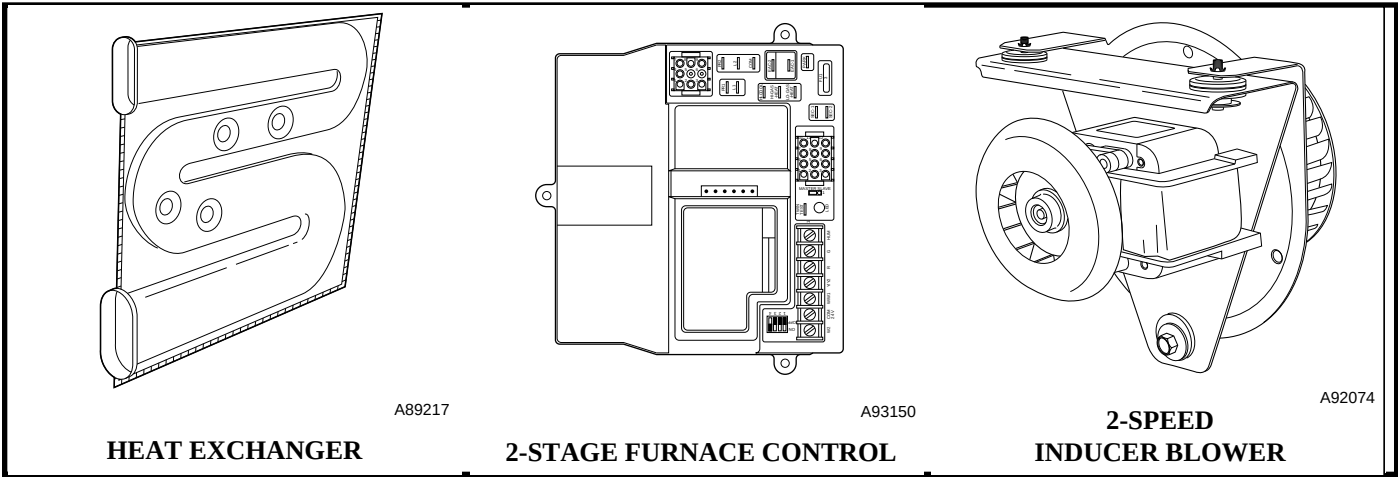
The superior attention to cabinet detail is obvious. The Carrier WeatherMaker 8000TS features 1-piece, seamless, wrap-around construction. There are no spot welds on the exterior surfaces of the WeatherMaker 8000TS Furnace. There is also double protection for the cabinet. First, a galvanized steel substrate provides resistance to rusting. Then the cabinet is constructed of prepainted steel—the same high-quality finish found on refrigerators and dishwashers.

Perhaps the most advanced feature of the WeatherMaker 8000TS is the state-of-the-art microprocessor control center which shows true leadership in furnace technology. The simplified electronics in this control provide high reliability while performing many of the functions of older, electro-mechanical devices in other furnaces. Advanced features of the control show Carrier’s true leadership in furnace technology. The control provides blower delay at start-up and shutdown, while monitoring furnace operations and functions. In the unlikely event of a service call, in less than a minute, the technician can use the self-test feature to determine if a major component has failed. The control will check itself, then the low and high inducers, silicon carbide ignition, and low-, medium-, and high-speed blower. The control

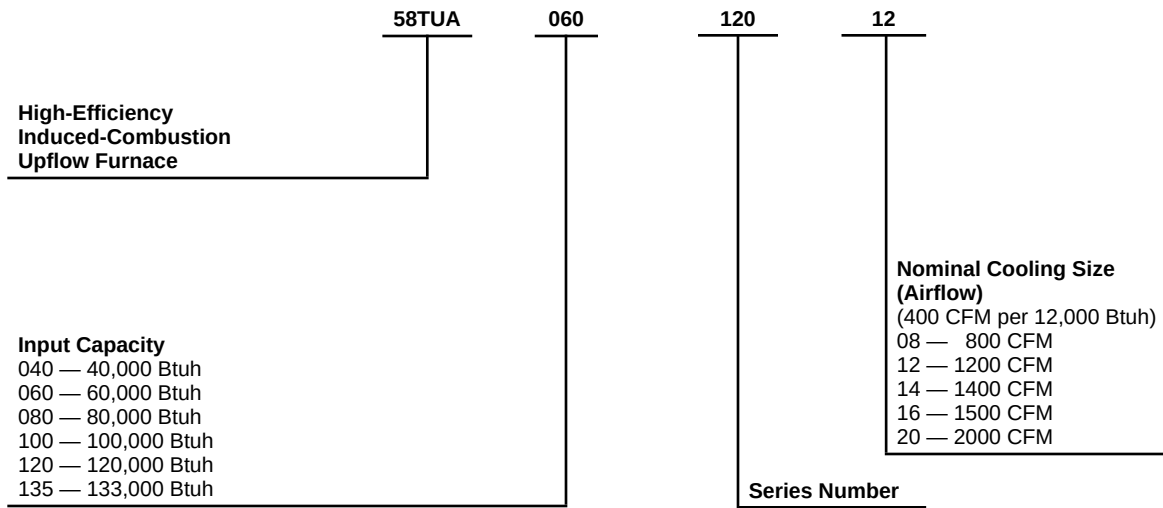
also features a 3-amp fuse that protects the transformer and control.

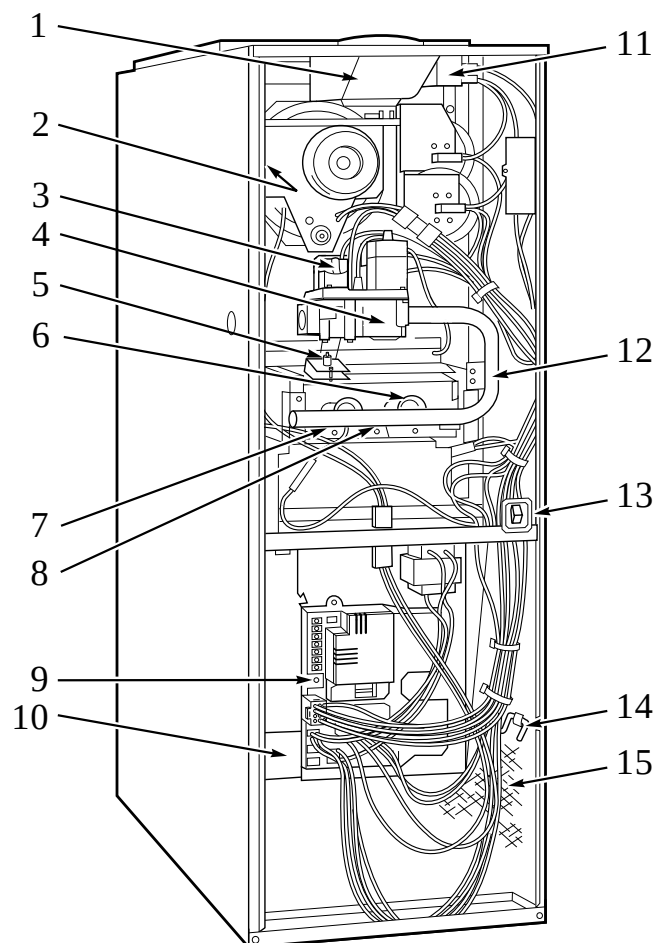
Our induced-combustion furnace has a patented draft safeguard switch. The draft safeguard switch will stop furnace operation if the vent system becomes blocked or is not operating properly.

Best of all, the Carrier WeatherMaker 8000TS is easily installed. Many features make this furnace the easy choice for replacement or new construction markets. Left and right connections are provided for gas and electrical supplies. An easy-to-remove bottom, heating and cooling blower speed selector, cased or uncased cooling coils, low-voltage humidifier, and electronic air cleaner terminal connections are among other features.



Model number nomenclature





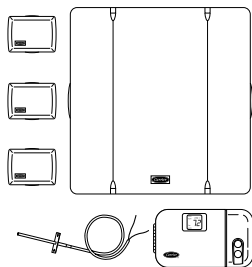
A97506

NOTE: The 58TUA Furnaces are for use with natural gas, but can be field-converted for propane gas with a factory-authorized and listed accessory conversion kit.

NOTE: Control location and actual control may be different than shown above.

- | | |
|--|-----------------------------------|
| ❶ Relief Box | ❸ Hot Surface Ignitor. |
| ❷ Rating Plate | ❹ Status LED Light and Control |
| ❸ Gas Valve Control Knob or Electric Switch (On/Off) | ❺ Blower and Blower Motor |
| ❹ 2-Stage Gas Valve | ❻ Draft Safeguard Tube and Switch |
| ❺ Manual Reset Flame Rollout Switch | ❼ Gas Manifold |
| ❻ Gas Burner | ❽ Blower Door Safety Switch. |
| ❼ Flame Sensor | ❾ Filter Retainer |
| | ❿ Air Filter |

Carrier accessories*

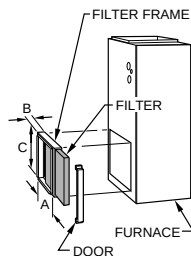


A97432

CONTROLS: THERMOSTATS AND ZONING

Available in programmable and non-programmable models, Carrier thermostats maintain a constant, comfortable temperature level in the home.

For the ultimate in home comfort, Carrier's 2, 4 and 8-zone systems allow temperature control of individual "zones" of the home. This is accomplished through a series of electronic dampers and remote room sensors. The 4-zone system is shown.

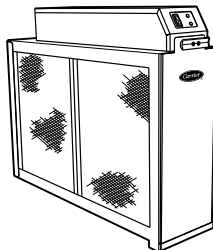


A93068

SIDE FILTER RACK

Custom-made filter rack for easy connection when a return plenum already exists. Provides easy access for cleaning filter.

A	23-1/8 in.
B	2-3/8 in.
C	14-1/2 in.

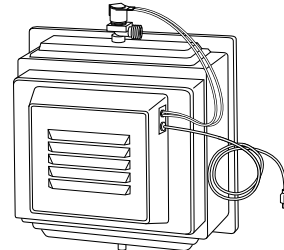


A97380

ELECTRONIC OR MECHANICAL AIR CLEANER

Cleans the air of smoke, dirt, and many pollens commonly found. Saves decorating and cleaning expenses by keeping carpets, furniture, and drapes cleaner.

Electronic air cleaner is shown.



A91365

MODEL HUMCCLFP HUMIDIFIER

By adding moisture to winter-dry air, a Carrier humidifier can often improve comfort and keep furniture, rugs, and draperies in better condition. Moisturizing household air also helps to retain normal body heat and provides comfort at lower temperatures.

UNIT SIZE	040-12	060-08 and 12	080-14, 16, and 20	100-12 and 16	120-16 and 20	135-20
ELECTRONIC AIR CLEANER (EAC)	Model AIRA					
MECHANICAL AIR CLEANER	Model 31MF					
HUMIDIFIER	Model HUM					
HEAT RECOVERY VENTILATOR	Models VA3B, VB5B, or VC5B					
ENERGY RECOVERY VENTILATOR	Model VL3A					
THERMOSTAT — NON-PROGRAMMABLE	Auto Changeover, °F/°C, 1-Stage Heat/1-Stage Cool — TSTATCCNAC01-B Auto Changeover, °F/°C, 2-Stage Heat/1-Stage Cool — TSTATCCNHP01-B Auto Changeover, °F/°C, 2-Stage Heat/2-Stage Cool — TSTATCCN2S01-B in AC Mode, 3-Stage Heat/2-Stage Cool in HP Mode Air Conditioner, 1-Stage Heat/1-Stage Cool, Manual Changeover, °F/°C — TSTATCCBAC01 Heat Pump, 2-Stage Heat/1-Stage Cool, Manual Changeover, °F/°C — TSTATCCBHP01**					
THERMOSTAT — PROGRAMMABLE	Auto Changeover, 7-Day Programmable, °F/°C, 1-Stage Heat/1-Stage Cool — TSTATCCPAC01-B Auto Changeover, 7-Day Programmable, °F/°C, 2-Stage Heat/1-Stage Cool — TSTATCCPHP01-B Auto Changeover, 7-Day Programmable, °F/°C, 2-Stage Heat/2-Stage Cool — TSTATCCP2S01-B in AC Mode, 3-Stage Heat/2-Stage Cool in HP Mode Dual Fuel Thermostat, Includes Outdoor Air Temperature Sensor — TSTATCCPDF01-B** Thermostat™ Control — Non-Programmable/Programmable Thermostat with Humidity Control — TSTATCCPRH01-B** (For use in Dual Fuel, AC, HP, and 2S applications. Includes Outdoor Air Temperature Sensor.)					
ZONING — 2 ZONE	ZONECC2KIT01, ZONEKIT2ZCAR					
ZONING — 4 ZONE	ZONECC4KIT01					
ZONING — 8 ZONE	ZONECC8KIT01					
SIDE FILTER RACK (Accepts one 16 x 25 x 1 Filter)	KGAFR0201ALL					
TWINNING KIT†	KGATW0401HSI					
HIGH-ALTITUDE PRESSURE SWITCH KIT‡	KGAHA5501PSW					
GAS CONVERSION KIT*— NATURAL-TO-PROPANE	KGANP26012SP					
PROPANE-TO-NATURAL	KGAPN21012SP					

* Factory-authorized and field-installed. Gas conversion kits are A.G.A. and C.G.A. approved.

† 16 and 20 models only.

‡ 5500 ft and higher above sea level.

** Do not use in zoning heat pump applications.

Physical data

UNIT SIZE		040-12	060-08	060-12	080-14	080-16	100-12	100-16	100-20	120-16	120-20	135-20
OUTPUT CAPACITY (BTUH)†	High Stage	32,000	49,000	49,000	65,000	65,000	81,000	81,000	81,000	98,000	98,000	108,000
	Low Stage	21,000	31,000	31,000	42,000	42,000	52,000	52,000	52,000	63,000	63,000	73,000
GAS INPUT (BTUH)*	High Stage	40,000	60,000	60,000	80,000	80,000	100,000	100,000	100,000	120,000	120,000	133,000
	Low Stage	26,000	39,000	39,000	52,000	52,000	65,000	65,000	65,000	78,000	78,000	91,000
SHIPPING WEIGHT (Lb)		124	132	134	150	154	160	166	184	178	194	204
CERTIFIED TEMP RISE RANGE (°F)	High Stage	15-45	45-75	25-55	35-65	30-60	50-80	40-70	25-55	45-75	40-70	45-75
	Low Stage	5-35	30-60	15-45	20-50	15-45	30-60	20-50	15-45	30-60	25-55	30-60
CERTIFIED EXT STATIC PRESSURE (In. wc)	Heating	0.10	0.12	0.12	0.15	0.15	0.20	0.20	0.20	0.20	0.20	0.20
	Cooling	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
AIRFLOW CFM‡	Heating High/Low	1095/875	740/600	1170/1000	1170/1010	1445/1260	1185/1015	1410/1265	1800/1460	1415/1260	1775/1500	1770/1525
	Cooling	1250	880	1195	1360	1740	1205	1575	2250	1620	2025	2055
LIMIT CONTROL		SPST (Auto-Reset)										
HEATING BLOWER CONTROL		Solid-State Time Operation										
INDUCER		2-Speed										
BURNERS (Monoport)		2	3		4		5		6		7	
GAS CONNECTION SIZE		1/2-in. NPT										
GAS VALVE (Redundant) Manufacturer		White-Rodgers										
Minimum Inlet Pressure (In. wc)		4.5 (Natural Gas)										
Maximum Inlet Pressure (In. wc)		13.6 (Natural Gas)										
IGNITION DEVICE		Hot Surface										

* Gas input ratings are certified for elevations to 2000 ft. For elevations above 2000 ft, reduce ratings 4 percent for each 1000 ft above sea level. Refer to National Fuel Gas Code Table F4 or furnace Installation Instructions. In Canada, derate the unit 10 percent for elevations 2000 ft to 4500 ft above sea level.

† Capacity and AFUE in accordance with U.S. Government DOE test procedures.

‡ Airflow shown is for bottom only return-air supply. For air delivery above 1800 CFM, see Air Delivery table for other options.

ICS — Isolated Combustion System

Performance data

UNIT SIZE	040-12	060-08	060-12	080-14	080-16	100-12	100-16	100-20	120-16	120-20	135-20
DIRECT-DRIVE MOTOR Hp (PSC)	1/3	1/5	1/3	1/3	1/2	1/3	1/2	3/4	1/2	3/4	3/4
MOTOR FULL LOAD AMPS	5.1	2.9	5.1	5.8	7.4	5.8	7.9	11.0	7.9	11.1	11.1
RPM (Nominal) — SPEEDS	1075-5	1075-4	1075-5	1075-4	1075-5	1075-4	1075-4	1075-5	1075-4	1075-4	1075-4
BLOWER WHEEL DIAMETER X WIDTHS (In.)	10 x 6	10 x 6	10 x 6	10 x 7	10 x 8	10 x 7	10 x 8	11 x 10	10 x 8	11 x 10	11 x 10
WASHABLE 16 x 25 x 1-in. FILTER — QTY	1	1	1	1	—	1	—	2	—	2	2
WASHABLE 20 x 25 x 1-in. FILTER — QTY	—	—	—	—	1	—	1	—	1	—	—

PSC — Permanent Split Capacitor

EFFICIENCY

UNIT SIZE		040-12	060-08	060-12	080-14	080-16	100-12	100-16	100-60	120-16	120-20	135-20
CAPACITY*	High Stage	32,000	49,000	49,000	65,000	65,000	81,000	81,000	81,000	98,000	98,000	108,000
	Low Stage	21,000	31,000	31,000	42,000	42,000	52,000	52,000	52,000	63,000	63,000	73,000
AFUE %* Nonweatherized ICS		80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0

*Capacity and AFUE in accordance with U.S. Government DOE test procedures.

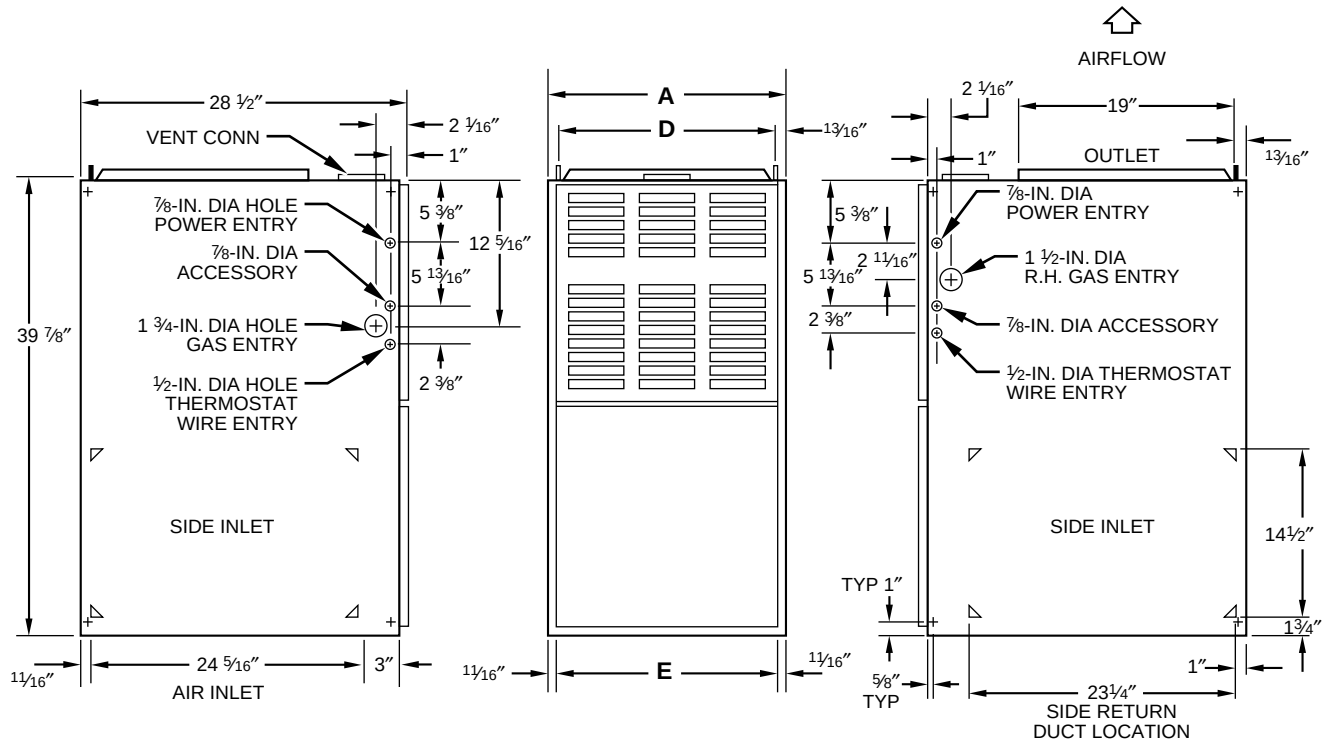
ICS — Isolated Combustion System

AIR DELIVERY — CFM* (With Filter)

UNIT SIZE	RETURN-AIR SUPPLY	SPEED	EXTERNAL STATIC PRESSURE (In. wc)							
			0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8
040-12	Bottom or 1 Side	High	1490	1430	1385	1325	1250	1175	1085	975
		Med-High	1095	1055	1050	1035	1000	950	895	820
		Med	875	895	900	885	860	825	770	700
		Med-Low	770	765	760	745	725	695	640	580
		Low	600	590	575	565	540	510	470	420
060-08	Bottom or 1 Side	High	1040	1010	975	935	880	810	735	640
		Med-High	855	830	800	765	715	660	600	490
		Med	745	715	690	650	605	550	475	385
		Med-Low	610	590	565	535	485	425	375	310
		Low	610	590	565	535	485	425	375	310
060-12	Bottom or 1 Side	High	1430	1380	1325	1265	1195	1125	1045	945
		Med-High	1170	1150	1135	1105	1055	995	925	845
		Med	1000	1000	990	970	935	885	835	750
		Med-Low	865	870	855	840	815	780	720	655
		Low	685	690	680	665	645	610	570	500
080-14	Bottom or 1 Side	High	1570	1535	1480	1415	1360	1280	1185	1070
		Med-High	1370	1355	1330	1290	1240	1170	1080	955
		Med	1170	1165	1150	1115	1085	1035	970	880
		Med-Low	1010	1005	990	965	905	845	785	705
		Low	1010	1005	990	965	905	845	785	705
080-16	Bottom or 1 Side	High	2010	1950	1875	1810	1740	1660	1550	1455
		Med-High	1675	1660	1625	1600	1545	1490	1395	1295
		Med	1445	1430	1415	1400	1370	1325	1265	1170
		Med-Low	1260	1260	1260	1250	1210	1180	1115	1030
		Low	950	985	985	970	950	915	845	740
100-12	Bottom or 1 Side	High	1470	1415	1340	1270	1205	1115	985	845
		Med-High	1340	1305	1245	1185	1130	1045	915	780
		Med-Low	1185	1175	1140	1075	1030	950	835	705
		Low	1015	1010	980	955	910	840	725	600
		Low	1015	1010	980	955	910	840	725	600
100-16	Bottom or 1 Side	High	1880	1815	1745	1690	1575	1500	1400	1265
		Med-High	1660	1615	1570	1505	1435	1355	1260	1170
		Med-Low	1455	1410	1375	1350	1290	1235	1145	985
		Low	1265	1265	1240	1210	1180	1110	995	855
		Low	1265	1265	1240	1210	1180	1110	995	855
100-20	Bottom Only	High	2485	2480	2405	2330	2250	2155	2025	1905
		Med-High	2165	2135	2105	2055	1995	1915	1830	1735
		Med	1785	1800	1785	1760	1725	1665	1600	1490
		Med-Low	1465	1460	1470	1460	1425	1385	1330	1255
		Low	1220	1215	1210	1195	1180	1150	1095	1020
	Both Sides or 1 Side and Bottom	High	—	2465	2420	2355	2265	2165	2065	1940
		Med-High	2145	2145	2135	2090	2025	1955	1870	1780
	1 Side Only	High	2410	2345	2275	2185	2095	1995	1875	1760
		Med-High	2140	2100	2050	1985	1920	1835	1740	1635
120-16	Bottom or 1 Side	High	1900	1845	1780	1705	1620	1530	1445	1320
		Med-High	1695	1645	1580	1520	1460	1385	1280	1155
		Med-Low	1460	1415	1375	1340	1290	1205	1110	—
		Low	1275	1260	1245	1230	1180	1135	—	—
		Low	1275	1260	1245	1230	1180	1135	—	—
120-20	Bottom Only	High	—	2260	2185	2085	2025	1935	1835	1730
		Med-High	2110	2070	2015	1960	1885	1810	1715	1620
		Med-Low	1790	1775	1755	1720	1670	1610	1535	1455
		Low	1495	1500	1515	1485	1450	1400	1345	1270
		Low	1495	1500	1515	1485	1450	1400	1345	1270
	Both Sides or 1 Side and Bottom	High	2425	2360	2275	2195	2095	2010	1890	1775
		Med-High	2055	2035	1995	1945	1880	1810	1735	1640
	1 Side Only	High	2245	2175	2070	1980	1900	1805	1695	1575
		Med-High	2050	1985	1925	1850	1765	1690	1585	1480
135-20	Bottom Only	High	—	2300	2235	2155	2055	1980	1870	1775
		Med-High	—	2050	2005	1945	1880	1805	1720	1640
		Med-Low	1790	1770	1740	1710	1635	1580	1520	1440
		Low	1520	1525	1505	1485	1450	1410	1350	1290
		Low	1520	1525	1505	1485	1450	1410	1350	1290
	Both Sides or 1 Side and Bottom	High	2405	2385	2310	2220	2140	2045	1945	1825
		Med-High	2090	2090	2040	1990	1925	1850	1765	1660
	1 Side Only	High	2325	2260	2175	2085	2000	1900	1805	1705
		Med-High	2085	2045	1985	1920	1855	1765	1680	1570

* A filter is required for each return-air supply opening.
 —Indicates unstable operating conditions.

Dimensions



- NOTES:**
- Two additional $\frac{7}{8}$ -in. dia holes are located in the top plate.
 - Minimum return-air openings at furnace, based on metal duct. If flex duct is used, see flex duct manufacturer's recommendations for equivalent diameters.
 - For 800 CFM—16-in. round or $14 \frac{1}{2} \times 12$ -in. rectangle.
 - For 1200 CFM—20-in. round or $14 \frac{1}{2} \times 19 \frac{1}{2}$ -in. rectangle.
 - For 1600 CFM—22-in. round or $14 \frac{1}{2} \times 23 \frac{1}{4}$ -in. rectangle.
 - For airflow requirements above 1800 CFM, see Air Delivery table in Product Data literature for specific use of single side inlets. The use of both side inlets, a combination of 1 side and the bottom, or the bottom only will ensure adequate return air openings for airflow requirements above 1800 CFM.

A99060

DIMENSIONS (In.)

UNIT SIZE	A	D	E	VENT CONN* (Dia)
040-12	14-3/16	12-9/16	12-11/16	4
060-08	14-3/16	12-9/16	12-11/16	4
060-12	14-3/16	12-9/16	12-11/16	4
080-14	17-1/2	15-7/8	16	4
080-16	21	19-3/8	19-1/2	4
100-12	17-1/2	15-7/8	16	4
100-16	21	19-3/8	19-1/2	4
100-20	24-1/2	22-7/8	23	4
120-16	21	19-3/8	19-1/2	5†
120-20	24-1/2	22-7/8	23	5†
135-20	24-1/2	22-7/8	23	5†

* Refer to the furnace Installation Instructions for proper venting procedures.

† Oval collar

MINIMUM INCHES CLEARANCE TO COMBUSTIBLE CONSTRUCTION

This forced air furnace is equipped for use with natural gas at altitudes 0 - 10,000 ft (0-3,050m).

An accessory kit, supplied by the manufacturer, shall be used to convert to propane gas use or may be required for some natural gas applications.

This furnace is for indoor installation in building constructed on site.

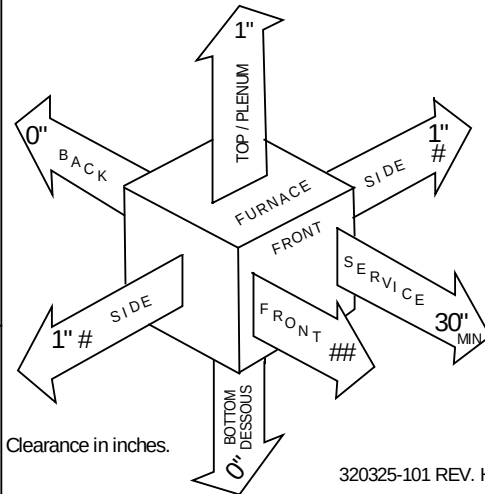
This furnace may be installed on combustible flooring in alcove or closet at minimum clearance from combustible material.

This furnace may be used with a Type B-1 Vent and may be vented in common with other gas-fired appliances.

For furnaces wider than 14.25 inches (362mm) may be 0 inches.

For single wall vent type 6 inches.
For Type B-1 vent type 3 inches.

This furnace is approved for UPFLOW installations only.



320325-101 REV. H

Vent Clearance to combustibles:

For Single Wall vents 6 inches (6 po).

For Type B-1 vent type 1 inch (1 po).

A98122E



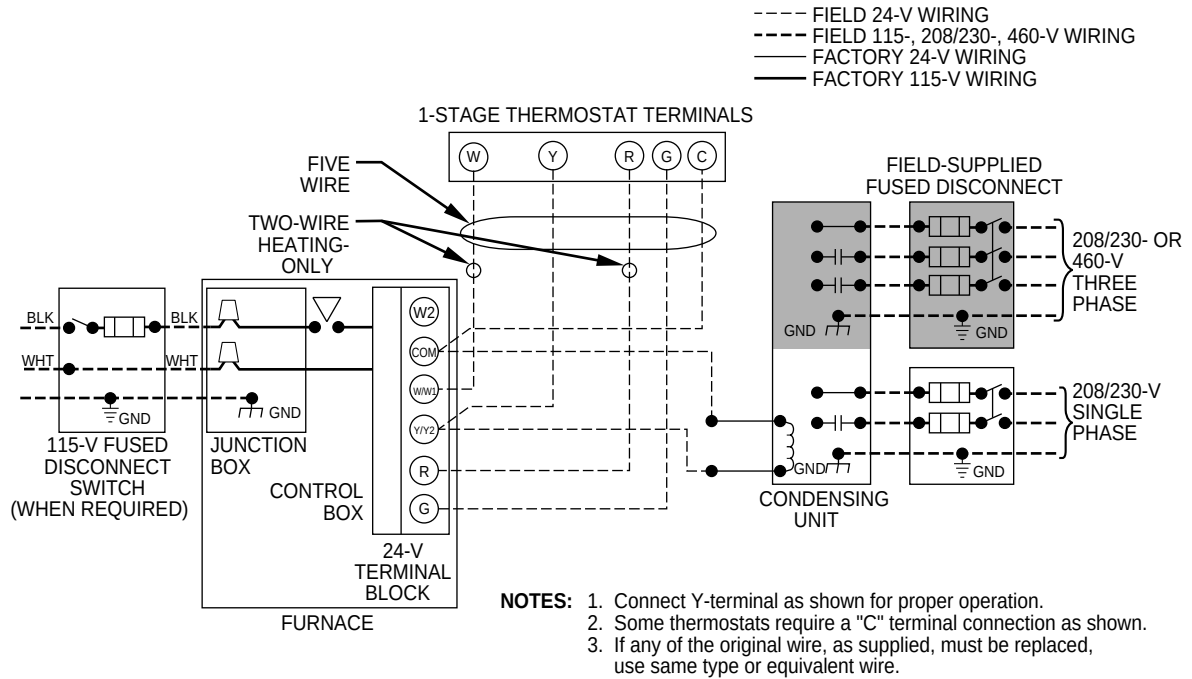
MEETS DOE RESIDENTIAL
CONSERVATION SERVICES
PROGRAM STANDARDS.

Before purchasing this appliance, read important
energy cost and efficiency information available
from your retailers.

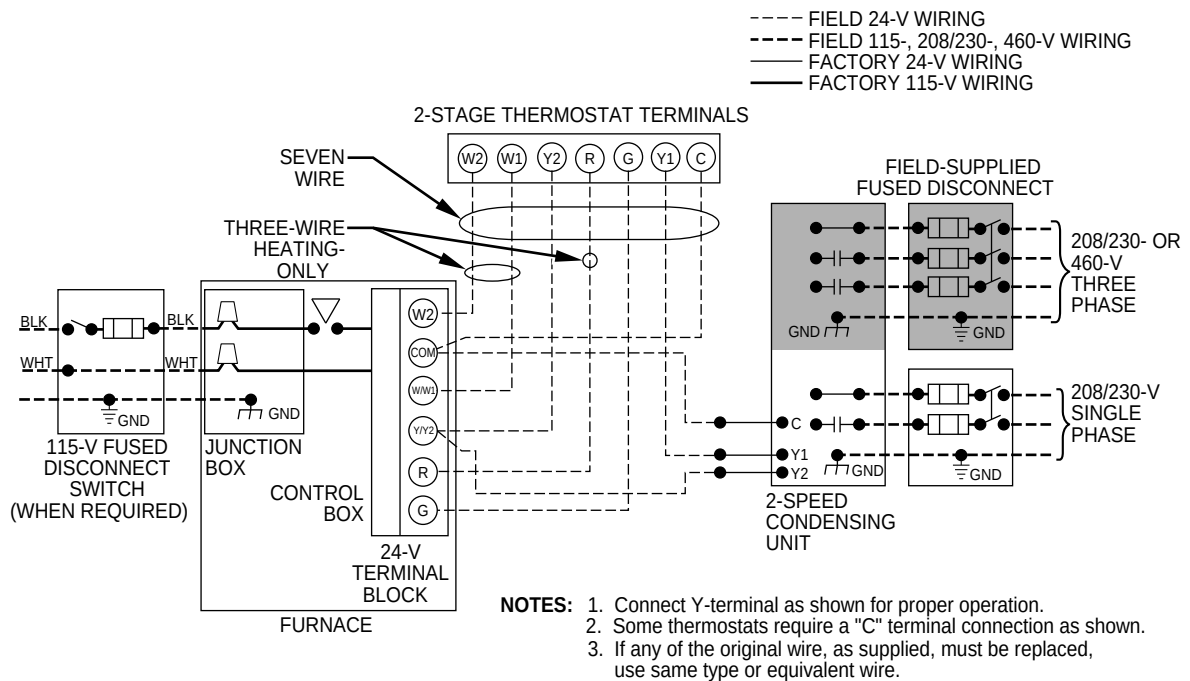


REGISTERED
QUALITY SYSTEM

Typical wiring schematics



A99071



A99072

Electrical data

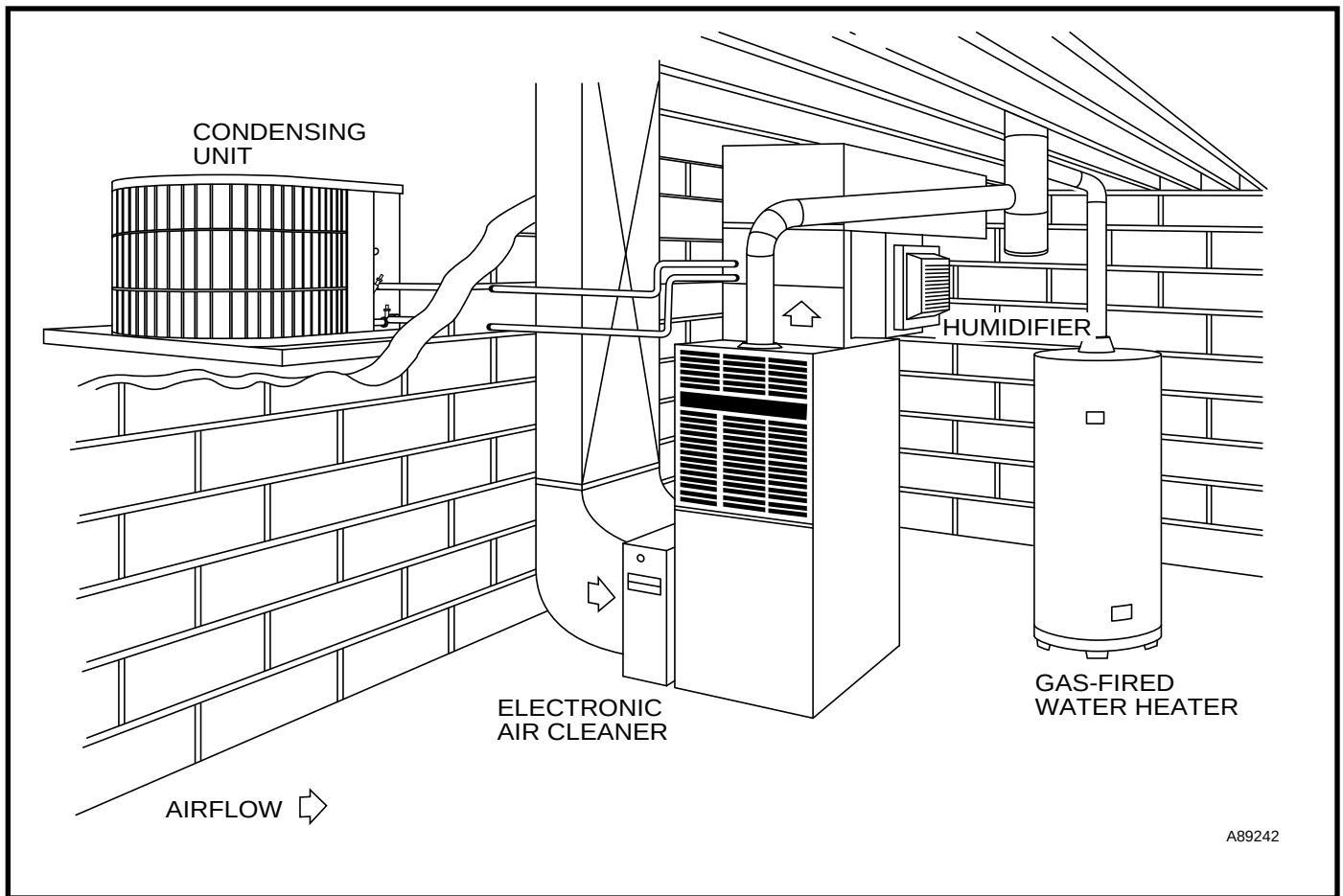
UNIT SIZE	040-12	060-08	060-12	080-14	080-16	100-12	100-16	100-20	120-16	120-20	135-20
UNIT VOLTS—HERTZ—PHASE	115—60—1										
MINIMUM WIRE SIZE	14	14	14	14	14	14	14	12	14	12	12
MAXIMUM WIRE LENGTH (Ft)*	32	45	34	31	27	35	28	32	28	31	33
MAXIMUM UNIT AMPS	11.4	8.2	10.6	11.7	13.4	10.5	13.2	17.7	13.2	18.2	17.4
OPERATING VOLTAGE RANGE (Min—Max)†	104—127										
MAX FUSE SIZE OR CKT BKR (Amps)‡	15	15	15	15	15	15	15	20	15	20	20
TRANSFORMER (24v)	40va										
EXTERNAL CONTROL POWER AVAILABLE	Heating										
	19va										
EXTERNAL CONTROL POWER AVAILABLE	Cooling										
	35va										
AIR CONDITIONING BLOWER RELAY	Standard										

* Length shown is as measured 1 way along wire path between unit and service panel for maximum 2 percent voltage drop.

† Permissible limits of the voltage range at which the unit will operate satisfactorily.

‡ Time-delay type is recommended.

Typical installations





Manufacturer reserves the right to discontinue, or change at any time, specifications or designs without notice and without incurring obligations.